## ABSTRACT OF THE DISCLOSURE

A fault-tolerant and secure on-line certification authority uses replication to achieve availability. A client request is forwarded to a delegate server. The delegate forwards the request to all certification servers. After receiving responses from a quorum of certification servers, the delegate sends a client response including a threshold signature protocol to sign the client response. The delegate then forwards the client response to the client.

10845-137-PatApp(D5)-102601